CLAIMS:

1. A system for locating an edge of an object in a two-or three dimensional image, in particular a medical image; the system including:

an input (310) for receiving a set of data elements representing values of elements of the image;

a storage (320) for storing the data set;

an output (330) for providing an indication of a location of an edge in the image; and

a processor (340) for, under control of a computer program, processing the data set to determine the edge of an object in the image by:

calculating at least a first- and/or second-order derivative of the data elements;

calculating isophote curvatures for the image where the curvatures are identified by κ;

determining a correction factor α that corrects for dislocation of an edge caused by curvature of an object and/or blurring of the data; the correction factor α depending on the isophote curvature κ; and

determining a zero crossing of an operator that depends on the calculated derivative and the isophote curvature.

2. A system as claimed in claim 1, wherein:

the image has been acquired with an acquisition device (315) causing acquired data to be blurred; the correction factor α also depending on a degree of blurring of the image.

3. A system as claimed in claim 2; wherein the blurring substantially corresponds to a convolution with a Gaussian point-spread function with a standard-deviation σ and the correction factor α depends on the standard-deviation σ of the Gaussian blurring function.

4. A system as claimed in claim 2, wherein the processor is operative to determine for the image an associated estimated degree of blurring and to load for the image

a correction factor function associated with the degree of blurring for the image; the correction factor function giving for an isophote curvature input value a corresponding correction factor value.

5. A system as claimed in claim 1, wherein the derivative is a Gaussian derivative and the operator is given by: $L_{ww} - \alpha\kappa L_w$, where w is a gradient direction.

6. A system as claimed in claim 3 and 5, wherein for a 2D image, α is given by:

$$\alpha(\sigma,\kappa) = 1 + \left(\frac{1}{\sigma\kappa}\right)^2 \left(1 - \frac{I_0\left(\left(\frac{1}{\sigma\kappa}\right)^2\right)}{I_1\left(\left(\frac{1}{\sigma\kappa}\right)^2\right)}\right)$$

where $I_n(\ )$ is the modified Bessel function of the first kind.

7. A system as claimed in claim 3 and claim 5, wherein for a 3D image the isophote curvature κ includes a first curvature component κ_1 in a direction of a highest absolute value of the curvature and a second curvature component κ_2 in a direction perpendicular to κ_1, the correction factor α depending on $\kappa_\Sigma = \kappa_1 + \kappa_2$.

8. A system as claimed in claim 7, wherein the correction factor α further depends on $\frac{\kappa_1}{\kappa_2}$.

9. A method of locating an edge of an object in a two- or three-dimensional image, in particular a medical image; the method including:

receiving a set of data elements representing values of elements of the image;

calculating at least a first- and/or second-order derivative of the data elements;

calculating isophote curvatures for the image where the curvatures are identified by κ;

determining a correction factor α that corrects for dislocation of an edge caused by curvature of an object and/or blurring of the data; the correction factor α depending on the isophote curvature κ; and

determining the edge of an object in the image at a location in the image that corresponds to a zero crossing of an operator that depends on the calculated derivative and the isophote curvature.

10. A computer program product operative to cause a processor to perform the method as claimed in claim 9.